Remarks

The present response is to the Office Action mailed in the above referenced case on November 16, 2004. Claims 8-10, 13 and 14 are presented below for examination. The Examiner has objected to the title of the invention, as well as the abstract portion of the specification. In response, applicant provides amendments to the title and specification in order to comply with the Examiner's requirements.

Claims 8-10, 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Liebowitz et al. (U.S. 5,812,545), hereinafter Liebowitz. The Examiner has further rejected 8-10, 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over Yong of record, and further in view of Clark et al. (U.S. 5,864,747), after Clark.

Applicant has again carefully studied the prior art of Yong, that of the newly presented references of Lieberman and Clark, and the Examiner's objections, rejections and statements of the instant Office Action. In response, applicant slightly amends the language of the base claims to more clearly recite the subject matter regarded as patentable. Applicant further provides arguments that will clearly establish that the claims as amended are patentable over the prior art references presented, either singly or in combination. Applicant points out and argues the key and patentable distinctions of applicant's invention, as embodied in the claims as amended, which clearly overcome the prior art presented.

Regarding claim 8, the Examiner has stated in his remarks that Liebowitz discloses applicant's broadband data transmission system comprising all of the limitations of applicant's claim, including control routines adapted for dividing large data entities into the lower priority queue into multiple smaller data entities

of a size that may be transmitted interspersed with data entities from the high-priority queue without causing the rate of transmission of the high-priority entities to fall below the minimum rate.

Applicant amends the language of the base claims to specifically recite that the smaller data entities in the lower priority queue may be interspersed with, and simultaneously transmitted with the data entities from the higher priority queue. Applicant's claim 13 is the method claim in accordance with the limitations of the system claim 8, and is similarly amended in language.

Applicant has carefully studied the portions of Leibowitz cited and applied in support of the Examiner statements, and can nowhere find any specific teaching or suggestion that the smaller data entities in the lower priority queue may be interspersed with, and simultaneously transmitted with the data entities from the higher priority queue. If the Examiner is aware of any such teaching or suggestion in the cited and applied portions, or anywhere else in the specification for that matter, applicant respectfully invites the Examiner, in response, to provide applicant with the associated passages, and how the teachings read on applicant's claim language.

Applicant believes that Leibowitz clearly fails to explicitly teach or suggest such limitations, or at the very least it is vague and inconclusive pertaining to interspersing the smaller data entities in the lower priory queue with those of the video data entities in the higher priory queue, and simultaneously transmitting the smaller data entities, along with the higher priority data entities in the higher priority queue.

To be more specific, for example, applicant refers the Examiner to the specification of Liebowitz, (col. 5, lines 17-48), where the high-priority and low priority queues are discussed, and although Leibowitz does teach fragmentation of the larger data entities into smaller data entities having a lower priority (non-

real-time data) with higher priority entities (real-time data), there is no mention of interspersing the lower priority data entities with the higher priority data entities and simultaneously transmitting both. Upon careful review of the remaining portions of Liebowitz cited and applied by the Examiner, is clear that there also is no specific teaching or suggestion of such capability.

Referring the Examiner now to applicant's specification, with reference to Fig. 2, waiting queues 67 (higher priority) and 69 (lower priority) are disclosed, in an embodiment of the invention, the unique software driver (APPP) driver 59 performs the additional function of fragmenting large data packets and sending the smaller data entities via that satellite path, the added capability to prevent a particular problem in transmission that can be caused by transmission of very large files. For example, as described in the specification, if a very large file is queued in the lower priority queue (69), when it is transmitted it will unduly tie up the satellite transmission. Assuming that packets need to be transmitted during this interim from the higher priority queue (67), an interruption in the video stream at the user's and will be the result.

As further explained, the packets of a size large enough to cause such an interruption are divided into smaller packets to be sent between bursts (interspersed with) from the high-priority queue so that the larger file may be transmitted without disrupting the video stream. Therefore, the lower priority smaller packages are transmitted simultaneously, interspersed with the packets of the higher priority queue.

Applicant therefore argues that the reference of Liebowitz clearly fails to teach or suggest all of the limitations of applicant's independent claims as amended, and consequently fails in a prima facie rejection of the independent claims, and applicant then respectfully requests that the reference accordingly be withdrawn from consideration.

The Examiner has further rejected claims 8-10, 13 and 14 as being unpatentable over Yong in view of Clark. In applicant's previous response filed November 12, 2003, applicant argued that Yong failed to teach control routines as disclosed and claimed in applicant's invention. Yong specifically teaches bandwidth sharing between high and low priority data sources using two different queuing disciplines, and control flow wherein priority crews are set up and assigned priority. The lower priory groups clearly are not given an opportunity to transmit data unless there are no packets in the high-priority group. Yong does not have the capability of dividing the large data entities into the lower prior queue, into smaller entities of the size that may be transmitted interspersed with, and simultaneously with the data of the high-priority queue.

In the instant Office Action the Examiner has not addressed applicant's above previous argument regarding the reference of Yong, and applicant maintains that the reference fails to teach or suggest the limitation. If the Examiner believes that the reference does indeed provide such teaching or suggestion, applicant respectfully invites the Examiner to please provide applicant with the specific teachings, and how such teachings reads on applicant's claim language as argued above.

The reference a Yong, as admitted by the Examiner in his remarks, does not specifically disclose broadband transmission or transmitting without causing the rate of transmission of the high-priority queue to fall below the minimum rate. The Examiner has relied on the reference of Clark to teach this deficiency. However, as argued by applicant above pertaining to the primary reference of Yong, the combination of Yong and Clark cannot possibly accomplish applicant's invention as claimed. Applicant therefore believes that claim 8 as amended and argued above is patentable over the references provided, either singly or in combination.

Applicant's claim 13 is the method claims in accordance with the limitations of claim 8, and has been rejected by the Examiner using the same rationale as applied to the rejection of claim 8. Applicant has amended the language of claim 13 in accordance with the amendments for claim 8, therefore, claim 13 is also patentable over the prior art presented, as argued above on behalf of claim 8. Depending claims 9, 10 and 14 are then patentable on their own merits, or at least as depended from patentable claim.

As all of the claims as amended and argued above are patentable over the references cited and applied, applicant respectfully requests reexamination and that the case be passed quickly to issue. If there are any extensions of time required beyond an extension specifically petitioned and paid with this response, such extensions are hereby requested. If there are any fees due beyond any fees paid by check with this response, authorization is given to deduct such fees from deposit account 50-0534.

Respectfully Submitted,
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